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IMPERIAL MYCOLOGICAL INSTITUTE 24 JUNE 1938

ROME
VILLA UMBERTO I
1938

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ROME — PRINTING OFFICE 'DITTA CARLO COLOMBO'

NOTES ON THE INTERNATIONAL INSTITUTE OF AGRICULTURE

Resolutions of the XIVth General Assembly (23-28 May, 1938). — Continuing the preliminary information published in the March Notes the following is the text of some of the resolutions adopted by the XIVth General Assembly referring to the activities of the International Institute of Agriculture.

Direction of the Work of the Institute.

The General Assembly,

having considered the Report of the Secretary General and the Finance Report,

is of the opinion that in arranging the future work of the Institute, the Permanente Committee should give first consideration to the maintenance und improvement of the regular services, particularly in the statistical, economic and social fields, and that these services should be regarded as constituting a first charge on the funds. of the Institute.

Ratification of Diplomatic Conventions.

The General Assembly

expresses the wish that the ratifications necessary for the implementing of the diplomatic conventions concluded under the auspices of the Institute should be made as soon possible by those States which have not already done so.

The Cinema in Agriculture.

The General Assembly

recommends the Permanent Committee to study in detail the pratical means of developing the exchange of films of agricultural interest between different countries and, in particular, to publish periodically a list of the films reported to them by the Member Governments, taking as their guide the ideas expressed during the discussion.

Broadcasting.

The General Assembly

approves the Report of Messrs. Bilbao and Paulucci di Calboli regarding rural broadcasting and brings to the special attention of the Permanent Committee the conclusions of this Report emphasizing that the aims should be at the same time technical, vocational, educational, social and domestic.

Nutrition.

(*A*) In the matter of human nutrition:—

The General Assembly,

having studied the Reports of (1) Dr. Van Rijn on " The Rôle of the International Institute of Agriculture in the study of the Nutrition Problem ", (2) Mr. Queuille on behalf of the French Government on " Hygiene in Nutrition and Agriculture " and (3) Dr. Staniewicz on behalf of the Polish Government on " Unemployment and Undernutrition of the Rural Population ":

(1) considers that, having regard to the evidence of malnutrition in all countries and to the serious undernutrition among both the rural and urban populations in many countries, the adoption by Governments of nutrition policies is a matter of importance to agricultural producers;

(2) recommends, in agreement with the Assembly of the League of Nations, that Governments should establish national nutrition committees and urges upon Governments that agriculture should be effectively represented on such committees;

(3) welcomes the action taken by the Permanent Committee in contributing in any important fashion to the international study of nutrition problems and decides that the International Institute of Agriculture should continue and intensify the study of these problems, especially in relation to agricultural production, consumption and prices;

(4) decides to co-operate closely with other official international bodies and to supply Governments with information designed to assist in the development of active nutrition policies;

(5) draws the attention of Governments to the problem of undernutrition among the rural population of certain countries with the object of indicating ways in which this state of affairs can be ameliorated;

(6) directs the attention of Governments to the malnutrition of the rural population which may result, among other reasons, from food-stuffs grown on unsuitable soils, from poor husbandry, etc.

(*B*) In the matter of live-stock feeding:—

The General Assembly,

in view of the importance of the rational feeding of live-stock in the reduction of the costs of production and in the improvement of the quality of food-stuffs of animal origin, milk and milk products, meat and eggs,

invites the Permanent Committee to direct its work on nutrition not only towards questions relating to the production of food-stuffs for human consumption but also to the problem of the rational feeding of live-stock.

Further, the General Assembly,

recognizing that a great volume of scientific work is being conducted in many countries,

asks the Permanent Committee to consider the desirability of action for the coordination of this work and for the interpretation of its most important findings in pratical terms which can be applied by farmers.

Monographs on the Principal Agricultural Commodities on the World Markets.

The General Assembly,

having noted with satisfaction the publication of two new monographs, in the series of studies of the principal agricultural products on the world markets, on Production of and Trade in Fats and Oils and on World Production of Meat,

recommends that the Permanent Committee continue to give attention to studies in this series to cover other of the principal commodities.

Survey of the Agricultural Resources of the World.

The General Assembly,

having taken note of the Report submitted in the name of the United States Delegation by Mr. Marquis on the subject of a Survey of World Agricultural Resources,

recognizes the need for further collaboration between the several international agricultural organizations in the preparation of information bearing upon international subjects and also recognizes the importance and value of comparability in the information published.

And

calls the attention of the Permanent Committee to the proposal and suggests that, after consultation with representatives of the several organizations, it should consider the possibility of taking the necessary steps to organize and complete such a survey in collaboration with these organisations within the limits of the available resources of the Institute.

Statistic of Hard Wheats.

The General Assembly

asks the Secretariat General to approach the countries producing hard wheats with a view to their adopting a common method in the preparation of statistics on the production of these varieties, taking into account their botanical characters.

The Instability of Farmers' Earnings and the Means of Stabilizing them.

The General Assembly,

having examined the Report presented on behalf of the Permanent Committee on the instability of farmers' earnings and on the means of stabilizing them, invites the Permanent Committee to examine the possibility of realizing the proposals made by the Reporter and, in particular, the following points:—

(1) To improve information on crop prospects so that they may be known at critical stages of growth;

(2) To attempt to stimate the magnitude and the causes of variations in the annual crops above or below the normal;

(3) To attempt to estimate methodically the gross annual income of agriculture in some countries, if possible from all crops or at least from the more important, with a view to compiling general indices of agricultural activity;

(4) To continue to study governmental measures affecting the prices of agricultural products, paying attention to the circumstances prompting such measures;

(5) To study the relation between the production and marketing of agricultural products which compete with, or act as substitutes for, each other, in order to try to forecast the changes which such competition or substitution may have on the existing agricultural situation;

(6) To continue to follow with the closest attention all technical improvements and methods of occupational organisation, of co-operation, of credit, of encouragement and of protection of farmers which might import more stability to the wages of agricultural labour.

These studies would only give rise to publications if they were sufficiently advanced and if financial resources permitted; for the present the competent services should assemble the documentation and compile, according to a methodical system, a regular series of comparative reports, which would facilitate the prompt solution of problems arising out of the evolution of the agricultural economy.

Influence of Industrial Inventions upon Agricuture and on the Marketing of Agricultural Products.

The General Assembly,

having considered the Report of the Government of the Netherlands " Influence of Industrial Inventions upon Agriculture and the Marketing of Agricultural Products (Raw Materials) ",

requests the Permanent Committee to consider including in the programme of work of the International Institute of Agriculture the study of the problem of the influence of industrial inventions on agriculture and on the marketing of agricultural products and to publish regularly the results of this study.

Improvement of the Conditions of Farmers.

The General Assembly,

having examined the Report of the Government of Finland and having heard the communication of the Belgian Delegation,

recommends the Permanent Committee to give its attention to questions concerning the improvement of the position of farmers and their families.

It also invites the Permanent Committee to examine to what extent the International Institute of Agriculture can undertake the publication of monographs dealing with the measures intended to improve the material and social conditions of farmers and of their families in the countries which have done exemplary work along these lines.

Activity of the Institute Regarding Agricultural Co-operation.

The General Assembly,

having examined the Report presented on behalf of the Government of Finland by Mr. J. H. Konttinen on the intensification of the activity of the International Institute of Agriculture regarding studies in agricultural co-operation,

expresses the hope that the Permanent Committee will continue to give this question its attention and study in what degree and to what extent it will be possible to undertake in 1939 and 1940 a methodical survey of the situation of the agricultural co-operative movement, of its methods and of the results achieved in various countries.

The radio communiqués of the International Institute of Agriculture will be transmitted between 2.45 and 2.52 p. m. on the following days: Thursday, English ***and*** German ***Saturday,*** Spanish; ***Tuesday,*** Italian ***and*** French.

They will be broadcast from Rome II (245.5 m.) and Rome 2 RO 4 (25.4 m.).

The hour of broadcasts is in Central European Time, which is one hour ahead of Greenwich Mean Time, and 5 hours ahead of Eastern Standard Time in the United States

INTERNATIONAL BULLETIN OF PLANT PROTECTION

1938 No. 6

DISCOVERIES AND CURRENT EVENTS *

Angola: Red Locust (*Nomadacris septemfasciata*) †

During the period from October to December, 1937, inclusive, swarms of *Nomadacris septemfasciata* were reported in different districts of the provinces of Luanda, Malange, Bié, Benguela, and Huila; more or less serious damage has been caused in the two latter provinces.

During the months of October and November, hoppers were observed in Huila Province.

Argentine Republic: Transmission of the 'Lepra Explosiva' of the Orange by Mites §

Mr. Mariano J. Frezzi, Agricultural Engineer, Acting Chief of the Phytopathological Laboratory, Bella Vista, Corrientes Province, has carried out a series of experiments on the transmission of the 'lepra explosiva' of the orange (see this *Bulletin*, 1935, No. 8, pp. 173-175) by Acarina or mites.

On young sweet orange plants, from 1 ½ to 2 years' old, cultivated in pots and with the aerial parts previously disinfected with alcohol, were transferred to each plant some 200 mites, selected from fresh lesions of plants, where they are preferably to be found sucking the sap. The mites placed in drops of distilled water immediately spread over all the plants; the pots were protected with covers and kept in the Laboratory.

After two and a half months, typical lesions of the 'lepra' were observed on the leaves, twigs, petioles and spines, which were very evident at four

* Under this and the next heading the countries are arranged in French alphabetical order.

† Communication from Mr. JORGE DE BARROS RODRIGUES QUEIRÓZ, Agricultural Engineer, Director of the Laboratory of Plant Pathology and Agricultural Entomology, Luanda, transmitted to the Institute by the General Government of the Colony.

§ Communication from the official correspondent of the Institute, Mr. JUAN B. MARCHIONATTO, Agricultural Engineer, Director of 'Sanidad Vegetal', Ministry of Agriculture, Buenos Aires, Argentine Republic.

months. At three months, 37 lesions were counted on one plant and 40 on another. Many leaves which showed 4-5 lesions in a short time acquired a yellow colour, subsequently falling.

According to the Division of Agricultural Zoology, the mite pertains to the genus *Tenuipalpus* and is near to *T. californicus*.

Eritrea: Locusts *

During the course of the month of March, 1938, no locusts were reported in the Colony.

India: New Plant Diseases Recorded in 1937 †

(Recorded in the Mycological Section at the Imperial Agricultural Research Institute, New Delhi, India):—

A rot of apples due to *Rhizopus arrhizus* Fischer in Baluchistan.

An anthracnose of cucurbits due to *Collectotrichum lagenarium* (Pass.) Ell. and Hals. in some parts of the Punjab.

A rust on *Rumex dentata* L. due to *Uromyces rumicis* (Schum.) Wint. at Karnal.

A leaf-spot and fruit-rot of chilli due to a species of *Alternaria* at Delhi and vicinity.

A rot of egg-plant fruits due to *Phytophthora parasitica* Dastur at Delhi.

A rot of mangoes due to *Dematium* sp. at Delhi.

A rot of peaches in the fruit markets of Delhi due to a *Aspergillus japonicus* Saito.

A rust of *Acacia modesta* Wall. due to *Ravenelia taslimii* Mundkur.

A disease of cow peas (*Vigna catjang* Endl.) due to a species of *Macrophomina* at Karnal.

A mildew of rubber (*Hevea brasiliensis* L.) due to *Oidium heveae* Stein. at Travancore.

A leaf-spot of the leaves of a species of *Passiflora* due to an *Alternaria* resembling *Alternaria solani* (E. and M.) J. and G. in the North Western Frontier Province.

A disease of Lisbon lemons due to a species of *Diplodia* in the same province.

(Recorded by the Mycologist, Travancore):—

Etiology of a wilt disease of coconut palms (*Cocos nucifera* L.) which is under study since Butler reported upon it in 1908, continues to be obscure. A plant pathologist has been specially appointed to intensely investigate this and a leaf spot-disease of the same plant.

* Communication from Dr. LUIGI M. BOLOGNA, Acting Chief of the Agricultural Bureau of Eritrea, Asmara, transmitted to the Institute by the Government of the Colony.

† Communication from Mr. G. WATTS PADWICK, M. Sc., Ph. D., D. I. C., Imperial Mycologist, Imperial Agricultural Research Institute, New Delhi, India.

(Recorded by the Professor of Botany, Punjab Agricultural College, Lyallpur, Punjab):—

* Leaf-spot due to *Phytophthora colocasiae* Rac. on *Colocasia* sp. in the Kangra valley, Punjab.

A disease due to a species of *Phoma* on *Citrus* seedlings.

A species of *Rhizoctonia* on gram (*Cicer arietinum* L.).

Solar heat method of controlling loose-smut of wheat continues to give good control. It is being applied to other cereal smuts also.

Investigations on flag smut of wheat, on gram blight (*Phyllosticta rabiei* =*Mycosphaerella rabiei* Kovachevsky), stem-rot of rice (*Leptosphaeria salvinii* Catt.=*Sclerotium oryzae* Catt.), *Citrus* wilt (*Fusarium* sp.), sugarcane smut (*Ustilago scitaminea* Syd.) and *Cytospora sacchari* Butler on sugarcane seem to be in progress.

(Reported by the Government Mycologist, Coimbatore, Madras Presidency):—

Shedding of tender nuts and dying up of the inflorescence of areca palms (*Areca catechu* L.) due to *Gloeosporium* sp.

Wilt and water injury of *Citrus maderaspatana* Tanaka due to *Diplodia* sp. and *Sporocybe hybrida* Mason.

Rhizoctonia bataticola (Taub.) Butl. on roots of *Citrus sinensis* L. and *Pestalotia* sp. on *Lupinus* sp. have also been noted.

The following diseases suspected to be of virus nature are recorded:—

Mosaic and little leaf of pigeon peas (*Cajanus indicus* Spreng.).

Brown-fleck of potatoes (*Solanum tuberosum* L.) and little leaf of egg-plants (*Solanum melongena* L.).

(Recorded by the Forest Mycologist, Dehra Dun):—

Heart rot due to *Trametes pini* (Brot.) Fr. on *Picea morinda* in Kulu, Punjab.

Anthracnose (?) of *Quercus incana* in the United Provinces.

A disease of *Leersia hexandra* Sw. due to *Testicularia leersiae* Cornu in Assam.

(Recorded by the Plant Pathologist, Cawnpore, United Provinces):—

* A *Fusarium* disease of tobacco (*Nicotiana tabacum* L.).

(Recorded by the Economic Botanist, Dacca, Bengal):—

Diseases due to * *Choanephora* sp. and *Sclerotium* sp. on *Crotalaria intermedia*.

Disease of bread-fruit trees due to a species of *Gloeosporium*.

* These diseases are well known in other parts of India but are new to the provinces.

Southern Rhodesia: Locust Invasion, 1932-1938 *

Monthly Report No. 63. February, 1938.

The last remaining swarms of the over-wintering adult stage of the Red Locust (*Nomadacris septemfasciata*, Serv.) appear to have died out during the first week in February.

Hatchings of hoppers, mostly on a small scale have occurred in the following districts: Mtoko, Mrewa, Darwin, Lomagundi, Sebungwe, Hartley, Salisbury, Mazoe, Marandellas, Umtali, Victoria, Bikita, Ndanga and Nyamandhlovu.

The hopper bands are being destroyed in all accessible localities.

The most serious outbreak in country occupied by Europeans has occurred around Concession in the Mazoe District, but even there the hatchings appear to be relatively light and the situation is well in hand.

The baiting method of destroying hoppers developed of recent years in the Union of South Africa is being tested in the last-named locality, but the frequent rains have so far handicapped the work.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Algeria. — By Decree of the President of the French Republic, dated 24 December, 1937, is confirmed a decision of the Algerian Finance Delegations dated 27 November, 1937, relative to increasing the disinfection tax of plant and food products. (*Journal officiel de l'Algérie*, Alger, 25 février 1938, XII[e] année, n° 8, p. 430).

Germany. — New measures for the control of fruit tree pests and diseases were promulgated on 6 January, 1938 by the Minister of Agriculture.

Every year before 1 March, all dead fruit trees as well as dying trees with practically a third of the branches dead should be eliminated. Trees which are attacked to such an extent that any treatment whatsoever appears useless, should also be removed. Consideration should be taken of the extent of the disease and the seriousness of the pest or disease in question. In cases where the interested party is doubtful regarding the measures to be taken, he should address himself to the Plant Protection Service and shall be required to carry out its instructions. The removed trees should be burnt on the spot or at some considerable distance from fruit cultures.

Dried branches and those attacked by mistletoe [*Viscum album*] or witches' broom of cherry [*Taphrina cerasi*] should be cut deeply and removed. As far as possible, branches attacked by canker [*Nectria*] and by the woolly aphis [*Eriosoma lanigerum*] should also be eliminated.

* Communication from the official correspondent of the Institute, Mr. RUPERT W. JACK, F. E. S., Chief Entomologist, Agricultural Laboratory, Department of Agriculture, Salisbury, Southern Rhodesia.

Bushes seriously attacked by American gooseberry mildew [*Sphaerotheca mors-uvae*] should be completely removed.

The wounds caused by pruning should be coated with wax or treated with tarry preparations.

The trees should be freed from moss, lichen and old bark; in this way, the winter refuges of the insects will be destroyed. The colonies of woolly aphis which will appear should be treated with a suitable preparation. It will be necessary, if a considerable number of woolly aphis are observed hibernating at the base of the trees, to expose the upper part of the roots and treat them with lime or else employ another method recognized as being efficacious by the Plant Protection Service.

Mummified fruits, caterpillar nests as well as the egg deposits of noxious insects should be removed. The egg-masses of the gypsy moth [*Porthetria dispar*] should be removed or soaked with petroleum.

The fruit trees on which because of their exaggerated height, it is not possible to carry out the aforesaid operations, should be eliminated. This measure will be very strictly applied in the regions where fruit cultivation is very intensive and economically important and where, consequently, the danger of the spread of fruit tree pests and diseases is very considerable. For cherry trees, a rule has been established that a height exceeding 10 metres should be considered as exaggerated. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Februar 1938, Bd. X, Nr. 1, S. 1-3).

*** By Circular of 11 January, 1938 and in conformity with the Circular of 6 August, 1936 relative to the control of rats [see this *Bulletin*, 1936, No. 10, p. 221] it is decided that the police authorities may entrust the execution of this control to a special organization or else to proprietors by causing them to employ effective control methods. (*Ibid.*, S. 3-4).

*** By Circular of 19 January, 1938, based on the Decree of 8 October, 1937 relative to the control of the wart disease of potato [*Synchytrium endobioticum*] [see this *Bulletin*, 1938, No. 2, pp. 28-29] it is prescribed that the cultivation of potatoes non-resistant to this disease should be reduced to a strict minimum. A list is given of the varieties, which, by special request, may still be cultivated, guaranteed and placed on the market for planting purposes.

The list only includes seven varieties:— ' Allerfrüheste Gelbe,' ' Centifolia,' ' Erstling ', ' Frühe Rosen ', ' Industrie ', ' Prof. Wohltmann ' and ' Zwickauer frühe Gelbe.' (*Ibid.*, S. 4-5).

*** By Ordinance of 19 January, 1938 relative to the import of horticultural products originating in France, Belgium, Luxemburg and Switzerland, the genus *Aucuba* has been added to the list of ornamental plants which may be imported throughout the year in the living state [see this *Bulletin*, 1938, No. 2, p. 29], (*Ibid.*, S. 5).

Germany (Hamburg). — By Decree of 20 January, 1938, the control of the apple and pear scab [*Venturia*] is rendered compulsory. Three treatments at different periods are to be carried out. Special measures are established with a view to guaranteeing the protection of bees against any injury which might be caused through the treatment of fruit trees. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Februar 1938, Bd. X, Nr. 1, S. 7-8).

England and Wales. — For the prevention of the introduction of the cherry fruit fly [*Rhagoletis cerasi*], the Importation of Raw Cherries Order of 1938, dated 11 April, 1938, contains restriction on importation in England and Wales of raw cherries grown in Spain, France, Italy, Germany and Hungary. (*Statutory Rules and Orders, 1938, No. 316*, London, 1938, 5 pp.).

Argentine Republic. — By Decree No. 110.794 of 28 July, 1937, emphasis is given to the measures established by Decree No. 108.718 of 21 June, 1937 [see this *Bulletin*, 1938, No. 4, p. 79] relative to the control of the South American locust [*Schistocerca paranensis*]. (*Boletín Oficial de la República Argentina*, Buenos Aires, 5 de marzo de 1938, año XLVI, núm. 13.090, pág. 2587).

Australia (South Australia). — The Phylloxera Act Amendment Act, 1937, assented to 8 December, 1937, amends from the administrative standpoint the Phylloxera Act, 1936. (*Anno primo Georgii VI Regis. A. D. 1937. Phylloxera Act Amendment Act, 1937*. Adelaide, 1937, 2 pp.).

Belgium. — By Royal Decree of 10 February, 1938, the destruction, by any means, of musk rats (*Fiber zibethicus*) has been made compulsory in the country.

The import, export and transit of living musk rats are prohibited.

The breeding and maintenance, as well as all trade in living musk rats are also prohibited. (*Moniteur Belge*, Bruxelles, 24 février 1938, 108e année, nº 55, p. 1012-1013).

United States of America. — Amendment No. 4 to revised rules and regulations supplemental to Notice of Quarantine No. 52, on account of the pink bollworm of cotton [*Pectinophora* (*Platyedra*) *gossypiella*], adds Santa Cruz County in Arizona and portions of Pima and Pinal Counties in the same State to the lightly infested areas, on account of the recent discovery of the light pink bollworm infestation.

This amendement of regulation 3 was approved on 29 December, 1937 and became effective on and after 3 January, 1938, and on that date supersedes amendment No. 3 which became effective on 28 October, 1937 [see this *Bulletin*, 1938, No. 4, p. 80]. (*B. E. P. Q. — Q. 52*, [Washington], 1938, 2 pp.).

France. — A Ministerial Decree of 28 February, 1938 authorizes, under certain conditions, the transit, through French customs territory, of potatoes originating in and proceeding from Belgium and the Netherlands throughout

the year, and also the transit of tubers originating and proceeding from Great Britain from 25 September to 15 May inclusive.

The Ministerial Decrees of 5 December, 1936 [see this *Bulletin*, 1937, No. 2, p. 32] and 24 November, 1937 are abrogated. (*Bulletin de l'Office de Renseignements agricoles*, Paris, 1er avril 1938, année 1938, nº 7, p. 164).

*** A Ministerial Decree of 15 March, 1938, establishes the delimitation of the zones contaminated by the Colorado beetle [*Leptinotarsa decemlineata*] and the protection zones.

The Ministerial Decree of 30 April, 1937 [see this *Bulletin*, 1937, No. 8, p. 180] is abrogated. (*Ibid.*, 15 avril 1938, nº 8, p. 186-193).

Italy. — By virtue of Law No. 987 of 18 June, 1931 [see this *Bulletin*, 1931, No. 9, p. 166], relative to measures for the protection of cultivated plants and agricultural products, as well as later modifications of the said Law [see this *Bulletin*, 1932, No. 11, p. 185; 1933, No. 3, p. 62; 1936, No. 9, p. 201; 1937, No. 6, p. 125], by Ministerial Decree of 23 January, 1938, provincial syndicates for wine-growing have been established in the provinces of Genoa, Savona, Milan, Varese, Bergamo, Cremona, Belluno, Fiume, Rovigo, Ferrara, Parma, Arezzo, Terni, Enna, Caltanissetta, and Agrigento. (*Bollettino Ufficiale del Ministero dell'Agricoltura e delle Foreste*, Roma, 1º marzo 1938, anno X, n. 5, pp. 365-366).

*** By two Ministerial Decrees of 3 February, 1938, the control of the European corn borer (*Pyrausta nubilalis*) has been made compulsory in the provinces of Bergamo and Bologna, adopting the method indicated in the Ministerial Decree of 24 June, 1937 [see this *Bulletin*, 1937, No. 9, pp. 205-206]. (*Ibid.*, 1º marzo 1938, n. 5, pp. 366-369).

*** The Circular No. 267 of 23 February, 1938 notifies that the Ministry of Agriculture and Forests has decided to carry out, in all the wine-growing regions of the country, experiments on the control of the downy mildew [*Plasmopara viticola*] according to the Casale method.

In two appendices of the said Circular, details are given on the measures to be observed during the course of these experiments. (*Ibid.*, 1º aprile 1938, n. 7, pp. 504-518).

Mexico. — By Decree of 1 March, 1938, the National Bank of Land Credit, in granting loans, must give preference to land owners who will have effectively disinfected their maize, wheat and bean seed.

All the seeds which the said bank will distribute as 'habilitación' should also be well disinfected.

Besides disinfection, the seeds should be coloured in such a manner as to be easily recognizable, and it will be prohibited for traders and agricultural workers who are not land owners, to utilize or keep these seeds.

The Bank of Agricultural Credit will preferably grant loans to farmers who will effectively disinfect their seeds.

These two establishments will accord loans giving preference to peasants who will select seeds according to the principles of agricultural science.

The National Commission of Irrigation, in distributing irrigation water, will give preference to farmers who select and disinfect their seeds.

The Department of the Interior will actively collaborate with the Ministry of Agriculture in seed selection and disinfection operations, the latter Ministry supplying the necessary disinfectant material.

The Ministry of Public Education will collaborate in this campaign through the rural teachers and auxiliary staff to whom the Ministry of Agriculture will give instructions and distribute the disinfectants required.

The Agricultural Department will give considerable assistance to the Ministry of Agriculture in this work, giving for this purpose the necessary instructions to its auxiliary staff.

The Ministry of Agriculture, with a view to rapidly diffusing the practice of seed disinfection, will distribute to land owners, metayers and small farmers, disinfectant material together with the necessary instructions. The Ministry is also authorized to distribute, free of charge, to land owners who, for some reason, did not consider it necessary to become associated and are not assisted by the Bank of Land Credit, to farmers who do not obtain any advantages from the Bank of Agricultural Credit, to metayers, holders of small plots of land, to settlers and small farmers, the quantity of disinfectant material required for the dry treatment of their maize, wheat and bean seed. (*Diario Oficial*, México, 31 de marzo de 1938, tomo CVII, núm. 27, págs. 2 y 3).

Czechoslovakia. — By Decree No. 40 of 25 February, 1938 relative to measures for preventing the introduction of the Colorado beetle (*Leptinotarsa* [*Doryphora*] *decemlineata*), the transit and importation of this insect are prohibited.

Importation is prohibited of living plants, parts of plants, fresh fruits and vegetables, residues contaminated by the Colorado beetle, as well as packing material and articles having come into contact with living plants or with the soils in which they were cultivated.

Importation is also prohibited of living plants, their parts and residues, as well as packing material and articles having come into contact with these plants or with the soils in which they were cultivated, originating in a country where the presence of the Colorado beetle has been verified.

A list of contaminated countries will be published.

Exceptions to this ruling may be accorded in certain determined cases.

All consignments which have been authorized for importation should be accompanied by an official phytosanitary certificate according to the form annexed to this Decree; the consignments will also be examined. (*Sammlung der Gesetze und Verordnungen des čechoslovakischen Staates*, Prag, 8. März 1938, Jahrg. 1938, 12. Stück, S. 90-93).

South Africa (Union of). — By Proclamation No. 151 of 30 July, 1937, the plants mentioned in Schedule ' A ' shall be added to the list of plants the introduction whereof into the Union is prohibited under sub-section (1) of section nine of the Agricultural Pests Act, 1911 (Act No. 11 of 1911).

The plants mentioned in Schedule ' B ' shall be withdrawn from the list of plants the introduction whereof into the Union is prohibited under sub-section (1) of section nine of the said Act.

Proclamation No. 285 of 1936 is hereby repealed.

SCHEDULE ' A '.

(*a*) The seeds and the flowering or seed heads of all species of *Arctium*.

(*b*) Fresh stone fruits, viz.: apricots, plums, peaches, nectarines and cherries.

(*c*) All species of citrus fruit and the peel thereof, whether fresh or dried, but excluding candied citrus peel.

(*d*) All species of *Opuntia*.

(*e*) Lucerne hay, whether fresh or dried.

SCHEDULE ' B '.

Fresh grapes.

(*The Union of South Africa. Government Gazette*, Pretoria, 13 August, 1937, Vol. CIX, No. 2461, pp. 471-472).

*** By Proclamation No. 201 of 30 September, 1937, the provisions of sections eight to twelve inclusive of the Agricultural Pests Act, 1911 (Act No. 11 of 1911) shall apply, *mutatis mutandis*, in respect of the introduction into the Union of plants from:—

(i) the Mandated Territory of South-West Africa, except citrus fruit;

(ii) Portuguese East Africa, provided that the said provisions shall not apply to maize and barley from the territory administred by the Companhia de Moçambique nor to citrus fruit from the same territory outside the Districts of Beira, Buzi, Neves Ferreira and Cheringoma; and

(iii) any state or territory in Africa north of the Zambesi, excluding Northern Rhodesia, Nyasaland and the Belgian Congo.

The provisions of sub-sections (3) and (4) of section nine and of sections ten to twelve inclusive of the said Act shall apply, *mutatis mutandis*, in respect of the introduction into the Union of:—

(i) seeds of maize and barley from the Belgian Congo;

(ii) any living plant from the Belgian Congo, Nyasaland or Northern Rhodesia; and

(iii) any unmanufactured leaf tobacco, cotton seed, unmanufactured cotton lint, and all kinds of unspun cotton waste, but excluding purified cotton wool and cotton batting, from the Belgian Congo, Nyasaland, Northern Rhodesia or Southern Rhodesia.

Proclamation No. 284 of 1936 is hereby repealed. (*Ibid.*, 15 October, 1937, Vol. CX, No. 2471, pp. 95-96).

*** By Proclamation No. 202 of same date, the Schedule to Proclamation No. 286 of 1936 is amended by the addition to paragraph 1 of the following:—

(*g*) any citrus fruit from the Districts of Beira, Buzi, Neves Ferreira and Cheringoma in the territory administred by the Companhia de Moçambique;

(*h*) any citrus fruit from the territory administred by the Companhia de Moçambique outside the Districts of Beira, Buzi, Neves Ferreira and Cheringoma, unless each consignment is accompanied by an official certificate signed by an officer of the Department of Agriculture, Beira, stating the name and address of the grower, the name of the farm or property on which the citrus fruit was produced, and the district in which such farm or property is situated. (*Ibid.*, p. 96).

Yugoslavia. — The Ministerial Decision No. 5570/11 of 28 January, 1938 gives a list of the countries to be considered for 1938 as being contaminated by potato wart disease (*Synchytrium endobioticum*), the Colorado beetle (*Leptinotarsa decemlineata*), the potato moth (*Phthorimaea operculella*) and the San José scale (*Aspidiotus perniciosus*). (*Službene Novine*, Beograd, 4 februara 1938, godina XX, broj 25, str. 2).

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Fungi probably saprophytes (at San Remo): *Hendersonia sarmentorum*, *Ascochyta* sp., *Phyllosticta perseae*.
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NOTES

Fifth International Locust Conference. — This Conference will be held at Brussels from 25 August to 1 September, 1938.

The address of the General Secretariat of the Conference is 7, Place Royale, Brussels.

Seventh International Botanical Congress. — The Congress will take place at Stockholm from 17 to 25 July, 1940.

One of the eleven sections will be devoted to mycology and bacteriology, and another to phytopathology.

Prof. ALESSANDRO BRIZI, *Segretario generale dell'Istituto, Direttore responsabile.*

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